47. Whitman on the Origin of Species.

[The Problem of the Origin of Species. By Charles Otis Whitman. Reprinted from 'Congress of Arts and Science, Universal Exposition, St. Louis, 1904,' vol. v.]

Professor Whitman here attempts to reconcile the theory of Natural Selection, as understood by Darwin and Wallace, with those of Orthogenesis or "definitely directed variation as the result of the inheritance of acquired characters," and Mutation or "sudden saltation." He does not consider that they are necessarily contradictory, but thinks that either Orthogenesis or Mutation may originate variation and that Natural Selection may follow thereupon. Variation may be "orderly" as well as "orderless." The writer elucidates his views by means of Pigeons and Doves, in which he considers the connexion between chequered and barred patterns; while he strongly upholds the view—with which we agree that, where possible, wild forms should be studied in preference to fanciers' varieties, which are seldom more than nominally pure.

XVII.-Letters, Notes and Extracts.

WE have received the following letters addressed "To the Editors of 'The Ibis'":---

SIRS,—I have the pleasure of informing your readers that I have lately obtained for my collection the following rare birds which were captured in this country :—

They are (1) a young example of *Larus leucopterus*, killed in November 1905 on the lagoons near Venice, and constituting the first trustworthy record for Italy; (2) an adult male, in full spring dress, of *Larus ichthyaëtus*, captured on the Isola Vacea (Sardinia), May 6th, 1906. This is the third occurrence of the bird in Italy, and it may be mentioned that the first two specimens obtained were taken by myself at the same spot*. Recently, at the beginning of last December, I received from the neighbourhood of Padua a

* Cf. E. Arrigoni Degli Oddi, Man. Orn. Ital. p. 805 (1904).

beautiful adult male (in full autumn plumage) of (3) Tardus atrigularis, which is the ninth Italian specimen preserved in our museums; and (4) three hybrids between the Common Pochard and the Ferruginous Duck (well known as Fuligula homeyeri). They are all adult males, and were captured in the large marshes at the mouths of the River Po, where Pochards and the allied diving-ducks are extremely plentiful in winter-time.

Yours &c.,

Count E. ARRIGONI DEGLI ODDI, M.B.O.U. Padua (Italy), Jan. 10th, 1907.

SIRS,—In the December number of Orn. Mon. (xiv. 1906, no. 12, p. 190) Dr. Reichenow describes as new a Crane from North-eastern Siberia (Bay of Anadyr) under the name of "Grus niediceki." The single specimen of the bird is said to be very similar to G. canadensis, but differs in being much smaller (wing 430 mm., tail 150 mm., bill 88 mm., tarsus 165 mm.) and in having the checks and throat whitish grey.

In working over my Siberian collections I carefully compared in the Academical Museum of St. Petersburg three specimens of Cranes from Anadyr collected by Dr. Grinewtzki, with three from Western America (a male from Northern California, 23 Feb., a female from the Mission of St. Raphael, N. Calif., 10 Jan., and a young bird from Herba Buena, San Francisco Bay, Nov.), all collected by Vosnesseusky.

I find that all these birds are practically identical, being light grey with dark slaty primaries, clear lavender-grey neck, whitish checks and throat. The only difference in plumage of the Anadyr birds is that they are somewhat more stained with dirty ochreous or bay colour, but this is usually the case in summer specimens of all grey Cranes.

I may add that the whitish throat and cheeks of American specimens of *Grus canadensis* were mentioned as long ago as 1884 by Baird, Brewer, and Ridgway (Water Birds of N. A. i. p. 408), as also the frequent rusty wash of its general grey colouring.

Locality					California.		
			,	,			
Age	Ad.	Ad.	Ad.	Ad.	Ad.	Juv.	
Sex	2	2	2	ð.	우.		
Wing	500	500	480	495	520	455	
Tail	170	195	180	183	$195 \cdot$	-175	
Tarsus	190	225	185	213	235	198	
Middle toe with claw	80	-99	81	89	94	84	
Culmen (exposed)	82	102	89	90	(126)	92	
Bill from gape	90	108	96	97	(135)	97	
Bill from nostrils	60	68	59	60	(89)	60	

As to the size of these specimens, I here quote my notes fully :---

The measurements are in millimetres, and those of the bill of the female of the Californian species are bracketed, as it had a malformation of this organ, the maxilla being unusually elongated and hooked.

So 'it is obvious that the Cranes of the North-eastern shore of Siberia are, as might well be expected, identical with those of Western America, and "*Grus niediecki*" is only a synonym of *G. canadensis*.

Yours &c.,

S. A. BUTURLIN.

St. Petersburg, Zool. Mus. Acad., Feb. 2nd, 1907.

SIRS,—Mr. A. Hyatt-Verrill, of Newhaven, U.S.A., has favoured me with the following communication in reference to the alleged extinction of the Dominican Parrot (*Chrysotis bouqueti*) :—

"My attention has just been called to your article in 'The Ibis' for October 1906, in which you state, on the authority of Mr. Clark, that the Dominican *Chrysotis bouqueti* is extinct. During the past three years I have resided in Dominica, and have made extensive collections of the birds. I have found *Chrysotis bouqueti* particularly abundant and easy to procure, and have secured over forty specimens. Graf von Berlepsch has a number which I sent him, and others were disposed of to various collectors. This species is increasing rapidly, and spreading over the whole island. On a former visit, fifteen years ago, I found Bouquet's Parrot much rarer than *C. augusta*, whereas at the present time it is far more common. The birds are found within a few miles of Roseau, and are particularly abundant in the Lagoon valley in the central part of the island, where they are very tame and feed near the houses of the planters in enormous flocks. In fact, at that place I have shot them from the verandahs of the houses. They are killed in large numbers for the market, and during the open season can be always bought for one shilling each.

"How Mr. Clark could have been misled into supposing this Parrot extinct is inexplicable to me."

1 am, Sirs, yours &c.,

Zoological Museum, Turin, Jan. 15th, 1907. Count T. SALVADORI.

SIRS,—Taking advantage of the Christmas vacation of the Colorado College I made a hasty trip to the Eastern States with the object of renewing my acquaintance with some of the Museums there. Leaving Colorado Springs at 10.40 A.M. on the 22nd of December, I reached New York at 5.30 on the afternoon of the 24th, thus accomplishing a journey of 2000 miles in 55 hours, with a single change of carriage at Chicago.

I spent the inside of the week at New York, but as I was staying in Long Island and the Christmas celebrations intervened I had not so much time as I could have wished to see everything.

One day was spent at the Zoological Park, where Mr. C. William Beebee, the Curator of the Birds, kindly shewed me all that was of interest. The Park lies a long way from the centre of New York, about eleven miles from the City Hall, and a journey of nearly an hour has to be made either by one of the Elevated Railways or by the Subway, as they call the new Underground Railway. The Park is beautifully situated, the rising ground being covered with woods and

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the Bronx River running through it, and its area is no less than 260 acres.

At the time of my visit, in midwinter, very few of the animals or birds were outside, and the large "Flying Aviary" was practically empty, all the denizens having been removed to the neighbouring Bird-house and the Ostrich-house. Mr. Beebee has taken special interest in forming a collection of American Passerine Birds, a great many of which seem hardly ever to have been kept in captivity successfully before. He has also a fairly extensive collection of European small birds. All these are at present housed in one wing of the bird-house in large cages, running from the floor to the roof. In the centre of the main portion of the house is a large cage for Waders and Shore-birds, where I saw several American Skimmers, which I had never before met with in confinement. Another bird which I do not recollect to have seen before in captivity was a Frigate-Bird; this was in the other winter-house together with a number of the larger forms, such as Cranes and Herons. All the inhabitants of the Zoological Park were certainly in wonderfully good condition, and spoke volumes for the care bestowed on them by Mr. Hornaday and Mr. Beebee.

At the American Museum of Natural History I found Mr. Allen in charge of the Mammals, and Mr. Frank Chapman of the Birds. Among the exhibited series two great groups-Bird-life in the San Joaquin Valley and Flamingos breeding in the Bahamas-are probably familiar to most of your readers, as several photographic reproductions of them have been published, but Mr. Chapman is now completing another series of bird-groups which certainly surpass anything that I have ever seen in beauty and vividness. A series of separate installations have been arranged along a gallery directly under a row of windows; between the installations and the public there is a boarded partition where windows are let in opposite each group. The result is that the light is all concentrated on the exhibition while the visitor is in a comparatively dark corridor. In fact, the effect is very similar to that in an Aquarium. Each exhibition consists of a typical scene of bird-like from some part of America, with a semicircular background of scenery very beautifully finished and copied from Nature, while the vegetation and other accessories in the foreground are carried out with great accuracy of detail.

Among the scenes which I recall are the Brown Pelicans nesting on Pelican Island in Florida, a representation of New Mexico with Cactus-Wrens, Thrashers, Roadrunners, and other characteristic Desert-forms. There is also a Golden Eagle on its nest from the Rocky Mountains in Wyoming, while several other groups are in preparation. On the whole, though slightly theatrical, they are the most beautiful and perfect representation of Bird-life that I have ever seen.

Another interesting exhibition is that of the commoner birds found within a short distance of New York. In the case of the migratory birds the specimens are changed every month, so that the visitor can easily identify the ordinary local birds.

The skin-collection under Mr. Chapman's charge is now growing very large; it is arranged in small, square, air-tight cases made of tin, into which are fitted light trays; as the cases are quite light and handy they can be readily shifted about, and it is easy to lay hands on any particular group or family for the purpose of study.

I spent a day at Cambridge, where most of my time was occupied in visiting the Agassiz Museum of Comparative Zoology. Since I last saw the Museum—some twenty-three years ago—considerable additions have been made, while a great many improvements are being carried out in the matters of installation and the renewal of faded specimens by Mr. Samuel Henshaw, the Director. The general plan of a geographical arrangement remains the same, and separate rooms are devoted to each of the great Faunal divisions of the World.

The study-collections of Mammals and Birds are under the honorary Curatorship of Messrs. O. Bangs and J. Brewster respectively. I was unfortunate enough to miss both these gentlemen, but Mr. Henshaw shewed me the general arrangement of the collections. Both Birds and small Mammals are contained in large box-like cases made of wood about 3 ft. \times 3 ft. \times 5 ft., lined with tin and closed in front by an air-tight door, which is not on hinges, but comes away quite freely when opened. Inside these are fitted with drawers or trays of stout cardboard in a frame of wood.

The cost of such cases, as Mr. Henshaw informed me, is from \$7 to \$8 apiece (about 30s.), and each would hold nearly a thousand small bird-skins. This seemed to me a very economical method of storage.

From Boston I travelled straight through to Princeton, New Jersey, where I was the guest of Mr. W. B. Scott, Professor of Geology in Princeton University. This is a charming Old-World spot, full of ancient houses and memories, dating back to old Colonial times. The University was founded in the time of George II. The Museum-collections are not at present in a very satisfactory state, as they are distributed among several buildings, and there is no room for an adequate display, but a new Museum is now in course of crection and will shortly be completed. The Vertebrate Palæontological material gathered together by Professor Scott from the Western States and from Patagonia in South America forms, of course, the most valuable and extensive portion of the collection, but there is also a very complete local collection of Birds mounted by Mr. W. E. D. Scott, a namesake of Professor W. B. Scott, who is the Honorary Curator of this department.

At Washington I spent some time at the Biological Survey, the Smithsonian and the United States National Museum, all of which are close together in a stretch of park on the south side of the City which runs from the White House towards the Capitol. The new National Museum is in the same park just opposite the old building, and is rapidly rising from its foundations, but it will be some time yet before it is completed; in the meantime very little is being done in regard to the exhibition-collections in the old buildings. Mr. Ridgway was unfortunately in the country when I called; he spends a good deal of his time there, working at the fourth volume of the 'Birds of Middle SER, IX,—VOL, I. 2 B and North America,' but I had the pleasure of meeting Mr. Richmond, Dr. Merriam, Messrs. Bailey, Oberholser, and Osgood, all of the Biological Survey.

On my way back west I spent a day at Chicago. At the Field-Columbian Museum Mr. W. B. Cory is now in charge of the department of Birds and Mammals in place of Mr. D. G. Elliot, who has recently resigned and settled in New York. The glory of the Field-Columbian Museum is undoubtedly a series of groups of larger Mammals, chiefly African: these are beautifully modelled and mounted by Mr. Akerley, the chief taxidermist, who is now on his way back from another collecting-trip in East Africa. They form a double row of large square free-standing cases down one of the long and lofty aisles of the building. The Bird-room was closed for rearrangement, and from what I saw of the collection it would certainly require a good deal of weeding out and renewal.

In the afternoon I visited the Museum of the Chicago Academy of Natural Sciences, which is situated in Lincoln Park, about three miles north of the City, while the Field-Columbian Museum must be at least six miles in the other direction. The collections here, though small and unambitious and chiefly confined to the Fauna of the Mississippi Valley, are very well installed, and reflect great credit on Mr. Woodruff, the taxidermist and Curator of the Birddepartment.

I reached Colorado Springs on the evening of the 6th of January, having been absent just fifteen days, after a very instructive and enjoyable excursion.

I am, Sirs, yours &c.,

W. L. SCLATER.

Colorado Springs, Colorado, Feb. 2nd, 1907.

The Anniversary Meeting of the German Ornithological Society. — The Fifty-sixth Anniversary Meeting of the "Deutsche Ornithologische Gesellschaft" (for 1906) was held at Breslau on the 21st of September last and the three following days, and, as will be seen by the Report on it in the last number of the 'Journal für Ornithologie,' was well attended. Many interesting subjects were discussed, amongst which were Herr Kollibay's new book on the birds of Silesia (see above, p. 357), Krause's 'Oologia Universalis Palæarctica,' the work carried on at the bird-observatory of Rossitten, and Dr. Merzbacher's collection of birds from the Thian-shan, in Central Asia. On the 24th an excursion was made to the Trachenburger See, to view the water-birds there. Dr. R. Blasius was re-elected President of the Society, and Dr. Reichenow General Secretary.

The International Zoological Congress of 1907. — The Seventh International Zoological Congress will be held at Boston, U.S.A., in August next, commencing August 19th. There will be a special Section (4) devoted to Ornithology, and we hope that some of our Members may be able to attend.

Mr. Witmer Stone (Academy of Natural Sciences, Philadelphia, U.S.A.), who is the Secretary of the Ornithological Section, writes to us on this subject as follows :---

"Will you kindly publish in your next number that I shall be pleased to hear from any British ornithologists who contemplate attending the Seventh International Zoological Congress at Boston in August next, and to answer any inquiries or furnish any details relative to the meetings.

"We are making every effort to have the meetings of the Ornithological Section thoroughly representative, and cordially invite all British ornithologists to attend.

"Opportunities will be offered of visiting the larger museums of the east, and everything will be done to make the visit a pleasant one."

Mr. C. H. B. Grant's Collection of South African Birds.— By the generous assistance of Mr. C. D. Rudd, Mr. C. H. B. Grant, one of the taxidermists who made for Col. Sloggett the interesting collection of the birds of Deelfontein described by Dr. Bowdler Sharpe in this Journal ('Ibis,' 1904, pp. 1, 313), has been enabled to continue collecting mammals and birds in South Africa, under the direction of Mr. Oldfield Thomas, and has sent home to the British Museum upwards of 3000 bird-skins, besides some nests and eggs *. Mr. Grant went first to British Namaqualand in March 1903, and collected mammals and birds at Klipfontein and other places in that district. Returning to Cape Town he proceeded to Wakkerstroom in the S.E. Transvaal, where he passed March, April, and May 1904. Subsequently Mr. Grant visited the Knysna district of the Cape Colony, Zululand, and the Zoutpansberg province of the N.E. Transvaal, and made excellent collections in all these quarters.

The Mammals of the "Rudd Exploration" have been described by Mr. Oldfield Thomas in a series of five papers published in the P. Z. S. (1904–1906); the Birds are still waiting for description, which, we trust, will soon be undertaken. There are not likely to be many novelties, but the list will, no doubt, largely add to the exactly known localities of South African birds.

The Foundation of the B. O. U .- The 'Proceedings' of the Ornithological Congress of 1905 have reached us too late for a proper Notice of their Contents to be inserted in our present Number, but there is a statement in the Presidential Address which requires immediate correction, as it concerns the Foundation of the Union. The true story was told in the preface to our first volume. The statement now made in the 'Proceedings' of the Congress (p. 110) that "the founders of 'The Ibis' consisted of a small number of College friends who happened to meet first at Canon Tristram's house at Castle Eden" is quite erroneous as regards the place of meeting; and, as Canon Tristram was an Oxford man, the expression "College friends" can hardly be applied to the several founders. Every one of the informal gatherings which led to the formation in 1858 of the B. O. U. took place at Cambridge, and not a single Meeting of any sort connected with the affair was held at Castle Eden, though undoubtedly Canon Tristram was one of the Founders of the Union.

* See Hist. of the Collections of the Nat. Hist. Department of the Brit. Mus. vol. ii. p. 460.

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